



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,769	11/20/2003	Jheroen P. Dorenbosch	CE05024N (79073)	8884

22917 7590 07/18/2006

MOTOROLA, INC.
1303 EAST ALGONQUIN ROAD
IL01/3RD
SCHAUMBURG, IL 60196

EXAMINER

NGUYEN, QUANG N

ART UNIT	PAPER NUMBER
----------	--------------

2141

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,769

Applicant(s)

DORENBOSCH ET AL.

Examiner

Quang N. Nguyen

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20060615.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Detailed Action

1. This Office Action is in response to the Amendment filed on 05/05/2006. Claims 1-2, 8-10, 12, 17-20 and 22 have been amended. Claims 1-22 are presented for examination.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 06/15/2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

3. The drawings were received on 05/05/2006.

Fig. 3 is acceptable.

Fig. 4 is objected to because step 410 "AUTHINTICATION INFORMATION" should be "AUTHENTICATION INFORMATION".

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 1, 4 are objected to because of the following informalities:

On page 2, line 11 of claim 1: “intercepting and intercepting” should be “intercepting and ~~intercepting~~ **identifying**”.

On page 3, line 3 of claim 4: “signaling message to a server” should be “signaling message to ~~[[a]]~~ **the** server”.

On page 3, line 2 of claim 7: “presence of a proxy” should be “presence of ~~[[a]]~~ **the** proxy”.

On page 5, line 5 of claim 17: “the message identifiable” should be “the **SIP** message identifiable”.

On page 5, line 9 of claim 17: "for transmitting the compressed message" should be "for transmitting the compressed SIP message".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 1 recites the limitation "the contact alias" in "compressing the at least one signaling message that includes the contact alias" on line 8, page 2. There is insufficient antecedent basis for this limitation in the claim.

7. Claim 9 recites the limitation "the mobile unit" in "receiving a message with a contact address from the mobile unit having the contact address" on lines 4-5, page 3. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 17 recites the limitation "the compressed message" in "transmitting the compressed message to a server" on line 14, page 5. There is insufficient antecedent basis for this limitation in the claim (*is "the compressed message" "the compressed SIP message" or "the compressed SIP response message"?*).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 1-6, 8-13 and 15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA), in view of Majumdar et al. (US 2003/0120813 A1), hereinafter "Majumdar", and further in view of Ekberg (US 7,003,282).**

11. As to claim 1, **AAPA** teaches a method of facilitating communications at a proxy in a network, comprising:

receiving a message from a mobile unit having a contact address (*the proxy receives a REGISTER message from a mobile unit*) (**AAPA, Background of the Invention, paragraph [0004]**);

intercepting and identifying at the proxy at least one signaling message for the mobile unit that includes the contact address (*after registering, all future SIP messages, containing the contact address of the registered mobile unit, i.e., directed at the mobile unit, will be sent to the proxy*) (**AAPA, Background of the Invention, paragraph [0004]**);

intercepting and identifying at the proxy at least one later signal message for the mobile unit (*after registering, all future SIP messages directed of the mobile unit will be sent to the proxy*) (**AAPA, Background of the Invention, paragraph [0004]**);

However, **AAPA** does not explicitly teach compressing the at least one signaling message that includes the contact alias; and routing the compressed at least one signaling message to the mobile unit with the contact address.

In a related art, **Majumdar** teaches an apparatus and method for generating compressed SIP messages from full sized SIP messages and vice versa (*compressing the at least one signaling message that includes the contact alias*) in order to decrease call set up time in an IP based communication system, wherein the SIP agent 108 compresses the full Response and sends the compressed Response (*as illustrated in Fig. 8*) to the Proxy 112a for eventual transmission to the Mobile Station 102 via the Base Transceiver Station 104 (*routing the compressed at least one signaling message corresponding to the mobile unit with the contact address*) (**Majumdar, Fig. 8 and paragraph [0032]**).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of **AAPA** and **Majumdar** to include compressing the at least one signaling message that includes the contact alias; and routing the compressed at least one signaling message to the mobile unit with the contact address since such methods were conventionally employed in the art to allow the system to decrease call setup time, i.e., increase network performance by generating compressed SIP message for ultimate transmission over the air interface.

However, **AAPA-Majumdar** does not explicitly teach not sending a second message corresponding to the at least one later message to the mobile unit; generating a response message in response to receiving the at least one later message; and sending the response message to a server.

In another related art, **Ekberg** teaches a system and method for authentication in a mobile communication system, wherein a security server transmits to the proxy server a SEC_INFO_REQ authentication request message, which contains a session identifier and the IMSI subscriber identifier. In response to this authentication request message, the proxy server transmits to then authentication center "AuC" an inquiry message, in accordance with the MAP protocol, to obtain a normal authentication triplet and relays the triplet further to the security server in a SEC_INFO_RSP message on behalf of the subscriber (*generating a response message in response to receiving the at least one later message; and sending the response message to a server*) (**Ekberg**, col. 6, lines 33-46).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of **AAPA-Majumdar** to include not sending a second message corresponding to the at least one later message to the mobile unit; generating a response message in response to receiving the at least one later message; and sending the response message to a server as taught by **Ekberg** to allow the proxy server, which can provide functions such as authentication, authorization, routing, network access control, etc., acting as an intermediate device that receives SIP requests and returns a response on behalf of the user.

12. As to claim 2, **AAPA-Majumdar-Ekberg** teaches the method of claim 1, further comprising:

establishing a contact alias associated with the mobile unit and the contact address, the contact alias substantially containing the contact address (*the proxy may create a contact alias that identifies a mobile unit*) (**AAPA, Background of the Invention, paragraph [0004]**); and wherein the intercepting and identifying at the proxy at least one later signal message for the mobile unit further comprises identifying the at least one later signal message using the contact alias (**Majumdar, paragraph [0020]**).

13. As to claim 3, **AAPA-Majumdar-Ekberg** teaches the method of claim 1, wherein the message from the mobile unit is one of a SIP REGISTER message, a SIP INVITE message; a SIP OK message; a SIP OPTIONS message; and a SIP BYE message (**Majumdar, Fig. 10 and paragraph [0018]**).

14. As to claim 4, **AAPA-Majumdar-Ekberg** teaches the method of claim 1, further comprising decompressing a signaling message received from the mobile unit and forwarding the decompressed signaling message to the server (*the SIP agent 108 receives the compressed INVITE message from the MS 102 via the BTS 104, generates the full INVITE message, and sends the full INVITE message to a Proxy 112a for routing to the Internet 118*) (**Majumdar, Fig. 6 and paragraph [0027]**).

15. As to claims 5-6, **AAPA-Majumdar-Ekberg** teaches the method of claim 1, wherein receiving the message from the mobile unit having a contact address, includes receiving a capabilities header indicating an ability to process compressed messages (*receiving a SIP Register Message as illustrated in Fig. 3 containing information such as default and full media capability, IP address, host name and codec options*) (**Majumdar, Fig. 3 and paragraphs [0019-0020]**).

16. As to claim 8, **AAPA-Majumdar-Ekberg** teaches the method of claim 1 wherein the step of intercepting and identifying a signaling message includes intercepting and identifying a SIP message (*after registering, all future SIP messages directed at the mobile unit will be sent to the proxy*) (**AAPA, Background of the Invention, paragraph [0004]**).

17. Claims 9-13 contain similar limitations as claims 1 and 3-5 do; therefore, they are rejected under the same rationale.

18. As to claim 15, **AAPA-Majumdar-Ekberg** teaches the method of claim 9, further comprising receiving authentication information from the mobile unit to facilitate authentication of the mobile unit (*usually, authentication information is sent by a User when challenged by a server*) (**Majumdar, paragraph [0020]**).

19. As to claim 16, **AAPA-Majumdar-Ekberg** teaches the method of claim 9, wherein the at least one compressed message is a legacy cellular call setup message (*a MS 102 transmits SIP call setup messages to a Base Transceiver Station BTS 904 over a dedicated RF traffic channel*) (**Majumdar, paragraph [0015]**).

20. Claims 17-22 are corresponding device claims of method claims 1-6 and 8; therefore, they are rejected under the same rationale.

21. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over **AAPA-Majumdar-Ekberg**, and further in view of **Haddad (US 200410215766 A1)**.

22. As to claim 7, **AAPA-Majumdar-Ekberg** teaches the method of claim 1, wherein the proxy can compress messages and transmit compressed messages to the mobile unit but does not explicitly teach advertising the presence of a proxy.

In a related art, **Haddad** teaches a method and apparatus for creating a network connection to a network, wherein the server 100 periodically transmits a SIP signal to advertise its presence to the computing device 102 as an invitation to close-by computing devices to connect to the network it advertises (**Haddad, paragraphs [0057-0058]**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of **AAPA-Majumdar-Ekberg**

Art Unit: 2141

and **Haddad** to include advertising the presence of a proxy for signaling message compression to the mobile unit since such methods were conventionally employed in the art to allow the system (network access point/server) to advertise its presence by emitting its SIP signal as an invitation to close-by computing devices to connect to the network it advertises.

23. Claim 14 contains a similar limitation as claim 7 does; therefore, it is rejected under the same rationale.

24. Applicant's arguments as well as request for reconsideration filed on 05/05/2006 have been fully considered but they are moot in view of the new ground(s) of rejection.

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Art Unit: 2141

26. Further references of interest are cited on Form PTO-892, which is an attachment to this Office Action.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



RUPAL DHARIA
SUPERVISORY PATENT EXAMINER